

4. A ferromagnetic ZnO-type compound film having a single-crystalline structure, wherein a ZnO-type compound is added with at least one of

(1) at least two metallic elements selected from a group consisting of V, Cr, Fe, Co, Ni, Rh, Ru, Ti, Mn, and Cu, and

(2) at least one metallic element selected from a group consisting of V, Cr, Fe, Co, Ni, Rh, Ru, Ti, Mn and Cu, and

at least one of an n-type dopant, and a p-type dopant

in an amount such that said ferromagnetic ZnO-type compound has a specific ferromagnetic transition temperature.

5. A ferromagnetic ZnO-type compound film having a single-crystalline structure, wherein a ZnO-type compound is added with at least one of

(1) at least two metallic elements selected from a group consisting of V, Cr, Fe, Co, Ni, Rh, Ru, Ti, Mn, and Cu, and

(2) at least one metallic element selected from a group consisting of V, Cr, Fe, Co, Ni, Rh, Ru, Ti, Mn, and Cu, and at least one of an n-type dopant and a p-type dopant in an amount such that said ferromagnetic ZnO-type compound has a specific light-filtering characteristic.

6. A method for adjusting ferromagnetic characteristics of a ferromagnetic ZnO-type compound, wherein said method comprises controlling the amount of one of (1) to (3) added to the ZnO-type compound, wherein (1) to (3) are:

(1) at least one metallic element selected from a group consisting of transition metallic elements V, Cr, Fe, Co, Ni, Rh or Ru,

(2) at least two metallic elements, one selected from a group consisting of said transition metallic elements, and the other selected from the group consisting of Ti, Mn and Cu, and

(3) either one of said (1), or (2), and at least one of an n-type dopant, and a p-type dopant.

7. The method of claim 6, wherein the ferromagnetic characteristic is a ferromagnetic transition temperature, and wherein the amount of said one of (1) to (3) added to the ZnO-type compound is controlled so as to produce a predetermined ferromagnetic transition temperature.

8. The method of claim 6, wherein the ZnO-type compound is stabilized by crystal-mixing said at least two metallic elements (2), so that there is an entire energy decrease by kinetic energy based on holes or electrons introduced by said crystal-mixing metallic elements themselves.

9. The method of claim 6, wherein the ZnO-type compound is stabilized by crystal-mixing said at least two metallic elements (2), so that a magnetic interaction between metallic atoms is controlled by holes or electrons introduced by said crystal-mixing metallic elements themselves.

Please add new Claims 11 and 12.

--11. (New) The ferromagnetic ZnO-type compound film of claim 1, wherein said ZnO-type compound comprises FeMnZnO .

12. (New) The ferromagnetic ZnO-type compound film of claim 1, wherein said ZnO-type compound comprises FeCoZnO .